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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,693	06/01/2001	Jack A. Wiens	16587-13 US	2495
21839	7590	11/12/2003	EXAMINER	
BURNS DOANE SWECKER & MATHIS L L P			SUN, XIUQIN	
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ALEXANDRIA, VA 22313-1404			PAPER NUMBER	
			2863	

DATE MAILED: 11/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/872,693

Applicant(s)

WIENS, JACK A.

Examiner

Xiuqin Sun

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,9 and 11-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,9 and 11-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/22/2003 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 9, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns (U.S. Pat. No. RE36510) in view of Harris (U.S. Pat. No. 3995145) and Beaudoin et al. (U.S. Pat. No. 6047250)

Burns teaches a method and system for passively operating and monitoring the service of a work vehicle during distribution of fluid products from a service vehicle to one or more fill ports of the work vehicle (see Abstract; col. 1, lines 13-24; col. 7, lines 62-67; col. 8, lines 1-5, lines 61-67 and col. 9, lines 1-13), comprising the steps and

means of: (a) providing a plurality of port identification data sources (col. 8, lines 55-60; col. 11, lines 50-59 and col. 15, lines 10-13); (b) attaching one of said data sources to each fill port on a vehicle to be serviced, each said data source being encoded to contain port data relating to the identity of the vehicle, the identity of the fill port, and the type of fluid product to be dispensed to the fill port (col. 8, lines 55-60; col. 11, lines 50-59 and col. 15, lines 10-13); (c) making one of a plurality of means for distribution of particular types of fluid products ready for dispensation from a service vehicle (col. 10, lines 13-67; col. 11, lines 42-50 and col. 8, lines 47-51); (d) determining at the service vehicle the type of fluid product being made ready for distribution (col. 10, lines 13-67; col. 11, lines 42-50 and col. 8, lines 47-51); (e) obtaining at the work vehicle a first set of port data from a data source associated with a particular vehicle fill port selected for service, and transmitting said first set of data to the service vehicle (Fig. 1; col. 6, lines 13-28, lines 38-67; col. 8, lines 61-67; and col. 9, lines 1-13); (f) receiving at the service vehicle the transmitted first set of fill port data and using same together with the known type of fluid product made ready for distribution to determine whether or not the selected fill port is about to be serviced with an appropriate fluid product, and generating a signal commensurate therewith (Fig. 1; col. 8, lines 61-67; col. 9, lines 1-13 and col. 10, lines 58-67); (g) distributing the fluid product to the selected fill port (col. 11, line 60 to col. 12, line 4); (h) obtaining at the service vehicle a second set of data associated with the distribution of the particular type of fluid product to the selected fill port (col. 7, lines 12-45 and col. 12, lines 5-31); and (i) logging the signal, the received first set of

data and the second set of data (col. 7, lines 62-67; col. 8, lines 1-5 and col. 12, lines 40-56).

Burns do not state explicitly: encoding said port identifying data sources magnetically; using a hand-held unit to transmit said first set of data, obtained from a probe and associated with a particular vehicle port to be serviced, to said service vehicle; repeating said steps of delivering fluid to a particular vehicle port until service of each port on the vehicle is complete; causing a horn to be actuated by said signal to validate selection of each port as the intended port to be filled; causing said signal to sound an alarm warning of any improper distribution of the product.

Harris teaches a technique for encoding and decoding data source identification information magnetically (see the entire disclosure).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the Burns' passive ROM device by the Harris magnetically encoded tag in order to provide an improved and efficient mechanism for identifying data sources (Harris, col. 1, lines 7-13 and col. 2, lines 8-29).

Beaudoin et al. disclose a system and method for monitoring fluid distribution, and teach: using a hand-held unit to transmit a first set of data, obtained from a probe and associated with a particular vehicle port to be serviced, to a service vehicle (col. 5, lines 6-34, lines 61-67; and col. 9, lines 1-17).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the Burns' hand-held unit by the Beaudoin hand-held

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RF data communication terminal in order to transmit information obtained at a vehicle port to a service vehicle unit (Beaudoin et al., Abstract).

The teachings of Burns further include repeating said steps to deliver various types of fluid to a plurality of customer vehicles (Fig. 1 and col. 6, lines 47-67; col. 11, lines 3-14 and col. 12, lines 5-39). In view of the teachings of Burns, one having ordinary skill in the art would be able to apply the same technique to carry out the method for a plurality of ports on one vehicle. The mere application of a known method to a group of instances by those skilled in the art would have been obvious.

The teachings of Burns further include using a series of beeps to validate selection of the port as the intended port (col. 11, lines 26-41). On the other hand, Beaudoin et al. teach a horn controlling means for controlling the horn of the customer vehicle, and making a sound, whenever needed in monitoring fluid distribution for heavy duty vehicles, by use of the horn controller (col. 7, lines 5-6 and col. 9, lines 1-17). It would have been obvious to include the teaching of Beaudoin horn controller in the Burns system in order to provide a better means for making a warning sound in validating the selection of the port (Beaudoin, et al., col. 9, lines 1-17).

Beaudoin et al. further teach that: a horn is actuated by the signal to validate selection of the port as the intended port (col. 7, lines 5-6 and col. 9, lines 1-17); and the signal causes the sounding of an alarm, the alarm warning of improper distribution of the product (col. 7, lines 5-6 and col. 9, lines 1-17). It would have been obvious to include the teaching of Beaudoin horn controller and warning means in the Burns

system in order to verify distribution of proper fluid to the appropriate port on a customer vehicle (Beaudoin, et al., col. 9, lines 1-17).

4. Claims 13-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burns (U.S. Pat. No. RE36510) in view of Harris (U.S. Pat. No. 3995145) and Beaudoin et al. (U.S. Pat. No. 6047250).

Burns further teaches a system, method and apparatus for passively monitoring distribution of fluid products from distribution sources to fill ports (or tanks) on a vehicle (see abstract; col. 1, lines 13-24; col. 7, lines 62-67 and col. 8, lines 1-5), comprising: an encoded port identifying step and means associated with each fill port on a vehicle to be serviced, said port identifying step and means containing port data relating to the identity of the vehicle, the identity of the corresponding fill port, and the type of material to be dispensed to the port (Fig. 1; col. 6, lines 13-28, lines 38-67; col. 8, lines 61-67; col. 9, lines 1-13 and col. 10, lines 58-67); reader step and means for reading said port data and downloading same to an on-board computer associated with the distribution sources of said fluid products (Fig. 1; col. 6, lines 13-28, lines 38-67; col. 8, lines 61-67 and col. 9, lines 1-13); flow monitoring and controlling step and means associated with said on-board computer and the distribution sources and operative to generate flow data indicating a particular distribution source, the type of fluid to be dispensed from said particular distribution source, and the volume of fluid actually dispensed from said particular distribution source in servicing a fill port (col. 5, lines 56-67; col. 6, lines 1-13, lines 47-67; col. 7, lines 1-5; col. 10, lines 42-57; col. 11, lines 60-67 and col. 12, lines 1-4); and step and means for producing a record of said port data, said flow data (col. 7,

lines 62-67; col. 8, lines 1-5 and col. 12, lines 40-56). Burns further teaches that: said port data includes information relating to the type of material to be distributed to a particular type of fill port (col. 6, lines 13-28 and col. 8, lines 31-60); the flow monitoring step and means includes Delivery Lists identifying the type of material to be put into a particular type of port (col. 6, lines 13-37; col. 9, lines 63-67 and col. 10, lines 13-57); step and means for determining the location of said vehicle to be serviced and the time of servicing, and for reporting same to said step and means for producing a record whereby such location and time of servicing is included in said record (col. 6, lines 29-4 and col. 12, lines 5-31); said reader step and means is operative to generate operator data identifying the operator responsible for servicing said vehicle, and to transmit said operator data to said receiver (col.5, lines 28-67 and col. 6, lines 1-13); said reader step and means is operative to generate operator data identifying the operator responsible for servicing said vehicle and for transmitting said operator data to said receiver (col. 8, lines 61-67; col. 9, lines 1-13; and col.12, lines 40-56).

Burns does not mention explicitly: using an array of polarized magnets to uniquely identify each fill port; using a magnetic reader to read the port data associated with a particular port; transmitting said port data to a remote receiver; the step and means associated with said flow monitoring step and means for comparing said port data to said flow data and operative to generate an alarm in the event that any aspect of said port data is incompatible with any aspect of said flow data; producing a record of said port data, said flow data and the fact that an alarm was generated; using lookup table to store the data about the type of material to be put into a particular port; use of

an array of organized indicators and associated set of code terms to uniquely identify a particular vehicle, a particular port and the type of material to be distributed to said particular port.

Harris teaches a technique for encoding and decoding data source associated with identification information magnetically, wherein an array of polarized magnets are used to provide uniquely identify of an object (see the entire disclosure).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Harris in the Burns method, system and apparatus in order to provide an improved and ore efficient mechanism for identifying data sources (Harris, col. 1, lines 7-13 and col. 2, lines 8-29).

Beaudoin et al. disclose a system for monitoring fluid distribution for heavy duty vehicles and teach: step and means for transmitting the tank identifying data collected from a handheld data terminal to a remote receiver mounted to a customer heavy duty vehicle (see abstract; col. 3, lines 24-50 and col. 8, lines 50-58); step and means for comparing said tank identifying data to flow data and operative to generate an alarm in the event that any aspect of said tank data is incompatible with any aspect of said flow data (col. 9, lines 1-17); step and means for producing a record of said tank data, said flow data and the fact that an alarm was generated (col. 8, lines 59-67 and col. 9, lines 1-30).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teachings of Beaudoin data communication mechanism, alarm generation mechanism, and job logging mechanism in the Burns

system in order to provide the operator with an efficient way to communicate with the remote receiver, and to provide a step and means for logging the operation of the system more effectively (see Abstract; col. 8, lines 59-67 and col. 9, lines 1-30).

It is obvious that a data structure such as a lookup table is well known in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a lookup table for the purpose of storing well organized and repetitive data records about the type of products to be distributed.

It is also obvious to one having ordinary skill in that art that an array of organized indicators and the associated set of code terms are equivalent to the key fields and the primary key which makes a row of data unique and identifiable in a relational database table. It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply a primary key constraint to said lookup table in order to uniquely identify each row of stored data about said vehicle, said port and said type of material to be distributed to said port. The mere application of a known technique to a specific instance by those skilled in the art would have been obvious and is within the level of ordinary skill in the art.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (703)305-3467. The examiner can normally be reached on 7:00am-4:30pm.

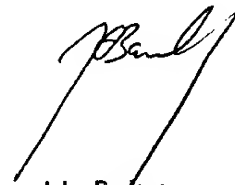
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (703)308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

XS

XS
November 1, 2003



John Barlow
Supervisory Patent Examiner
Technology Center 2600